

## REMARKS

Claims 1-5, 9, and 16 are pending in the present application and at issue. It is respectfully submitted that the present amendment presents no new issues or new matter and places this case in condition for allowance. Reconsideration of the application in view of the above amendments and the following remarks is requested.

### I. The Rejection of Claims 1-5, 9, and 16 under 35 U.S.C. 103

Claims 1-5, 9 and 16 stand rejected under 35 U.S.C. 103 as being unpatentable over Dutron et al., WO 2004/023879 in view of JP 2001-245665, Polypeptide ID AAM51802. This rejection is respectfully traversed.

Dutron et al. disclose a method and a composition for the improvement of bakery products comprising at least one enzyme with xylanolytic activity from the glycoside hydrolase family 8. Dutron et al. further disclose that preferred xylanases of glycoside hydrolase family 8 are obtained from the strains *Pseudoaltermonas haloplankis* TAH3a and *Bacillus halodurans* C-125. The *Pseudoaltermonas haloplankis* xylanase has the amino acid sequence of SEQ ID NO: 7 and the *Bacillus halodurans* xylanase has the amino acid sequence of SEQ ID NO: 8.

However, Dutron et al. do not teach or suggest the use of xylanases of glycoside hydrolase family 11 such as SEQ ID NO: 2 of the present application. See UniProt database, Accession no. Q9KEF3 (a copy of which is submitted herewith), which discloses that SEQ ID NO: 2 is a xylanase of glycoside hydrolase family 11. Moreover, as noted in Applicants' prior response, the *Bacillus halodurans* C-125 xylanase disclosed in Dutron et al. has low sequence identity of only approximately 8% to the xylanase of SEQ ID NO: 2.

Applicants also submit a Declaration of Tina Nørgaard-Salomonsen (the "Nørgaard-Salomonsen Declaration"), which describes experiments comparing to the performance of a *Bacillus halodurans* C-125 xylanase of glycoside hydrolase family 11 and having the amino acid sequence of SEQ ID NO: 2 disclosed in the above-identified application and a *Bacillus halodurans* C-125 xylanase of glycoside hydrolase family 8 and having the amino acid sequence of SEQ ID NO: 8 disclosed in WO 2004/023879 in baking with respect to dough properties (dough stickiness, softness, extensibility and elasticity), and with respect to volume and crumb firmness of the baked product.

The Nørgaard-Salomonsen Declaration discloses that crumb firmness was evaluated 1, 8, 15 and 22 days after baking. In particular, three bread slices from two breads prepared from each of six doughs were evaluated on each measurement day. The results at days 1, 8, 15, and 22 demonstrate that the use of EXP00760 (the family 11 xylanase from *Bacillus halodurans*

C-125) and Novamyl resulted in a softer crumb compared to only adding Novamyl. In contrast, the use of EXP02385 (the family 8 xylanase from *Bacillus halodurans* C-125) and Novamyl did not have an effect on the firmness of the bread (*i.e.*, there was no statistical difference when compared to the samples containing only Novamyl). Dr. Nørgaard-Salomonsen states that “These results demonstrate that the family 11 xylanase from *Bacillus halodurans* C-125 (SEQ ID NO: 2 of the present application) has a significantly better effect on the firmness of bread than the family 8 xylanase from *Bacillus halodurans* C-125 (SEQ ID NO: 8 disclosed in WO 2004/023879). These results are not predicted by the prior art, and therefore are surprising and unexpected.”

JP 2001-245665 discloses the xylanase of family 11 having the amino acid sequence of SEQ ID NO: 2 of the present application.

However, JP 2001-245665 also does not teach or suggest the xylanase of SEQ ID NO: 2 for use in baking, as claimed herein.

For the foregoing reasons, Applicants submit that the claims overcome this rejection under 35 U.S.C. 103. Applicants respectfully request reconsideration and withdrawal of the rejection.

## **II. Conclusion**

In view of the above, it is respectfully submitted that all claims are in condition for allowance. Early action to that end is respectfully requested. The Examiner is hereby invited to contact the undersigned by telephone if there are any questions concerning this amendment or application.

All required fees were charged to Novozymes North America, Inc.’s Deposit Account No. 50-1701 at the time of electronic filing. The USPTO is authorized to charge this Deposit Account should any additional fees be due.

Respectfully submitted,

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